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- I. *Observationes occultationis Stella τ in origine cornu Borei Tauri, sub disco Luna, simulque Eclipses Luna statim insecuta, Anno 1713. Novemb 21. mane St. vet. Romæ habitæ, & à præstantissimo Astronomo D. Francisco Blanchino. R. S. S. communicatæ. Cum Emerfionibus nonnullis Intimi Jovialis ex umbra Jovis, ibidem eodem anno observatis.*

H. post Merid.	h	"	STELLA Bayero τ Tauri proxime appellit
12 53 34			ad limbum Lunæ, observata per Telescopium
12 54 34			duodecim palmorum.
			Eadem jam occultata est ab ea parte Lunaris
			Limbi, quæ media ferme est inter maculas Ari-
			starchi & Galilei. Parallelus diurnus à centro
			Lunæ descriptus apparet Australior quam stella τ
			partibus Micrometri $7\frac{1}{2}$, qualium Lunæ diame-
			ter subtendit 37. Stellæ igitur τ declinatio Borea-
			lior est declinatione apparente Lunaris centri mi-
			nutis circuli maximi $5\frac{1}{2}$ circiter.
14 0 14			Sirius attingit Meridianum: unde verificata sunt
			tempora.
14 32 57			Stella τ , quæ aliquot minuta excesserat
			è limbo Lunæ, in revolutione diurna præcedit
			limbum occidentalem Lunæ secundis horariis 0'. 33", eademque præcedit centrum Lunæ secundis
			103" five 1'. 43".
14 42 50			Eadem præcedit limbum Lunæ secundis 48", &
			centrum 1'. 58".
14 50 37			Differentia Ascensionis rectæ stellæ & limbi est
			1'. 03", centri vero Lunæ & ejusdem stellæ 2'. 13".
15 0 0			In limbo Lunæ Penumbra, quæ antea erat di-
			lutior, sensim fit densior.
15 2 20			Penumbra fit evidentior, sed nondum apparet
			Umbra vera.
15 4 20			Initium incidentiæ Lunæ in Umbram veram, ea
			in parte limbi quæ proxima est maculæ Schiccardi.
			Umbra

^s	h	'	"	
15	5	21		Umbra vera jam obtegit partem unam, qualium Lunæ diameter in Micrometro obtinet 37.
15	7	20		Jam partes duæ obteguntur qualium Lunæ diameter est 37.
15	16	20		Jam obteguntur Lunariorum diametro $\frac{5}{37}$.
15	31	20		Latent Lunariorum diametri $\frac{2}{37}$.
16	12	0		Jam latent in diametro partes $\frac{15}{37}$.
16	17	20		Partes latentes 15, ut antea.
16	50	20		Jam partes latentes, $\frac{15}{37}$.
16	54	35		Incipit emergere prior limbus Tychoonis.
16	56	9		Jam totus Tycho emergit.
17	13	30		Latent Lunariorum diametri partes 5 è 37.
17	27	45		Umbra vera excedit è limbo Lunæ, in loco designato per diametrum ductam inter <i>Aristarchum</i> & <i>Platonem</i> situ inter-medio.

N. B, *Hæc observatio pluris æstimanda, quod occultatio stelle π acciderit tam vicina Opposito Solis, ut inde locus Solis inter Fixas rite examinari poterit.*

Emerfiones Satellitis intimi Jovialium ex umbra Jovis observatæ Romæ, anno 1713.

Sept. $\frac{11}{12}$ post meridiem 8^h. 38'. 20" Intimus Jovis Satelles incipit emergere, è regione spatii inter utramque Jovis fasciam protensi. Observatio peragebatur Telescopio D. *Andreae Chiarelli* longitudinis 40 palm. Romanorum. Deinde 8^h 44'. Tertius Satelles ita apparebat Quarto conjunctus, ut ambo viderentur unicus Satelles, Distabant à centro Jovis diametris Jovialibus circiter $5 \frac{1}{4}$. Hora vero 9^h. 4', Jam disjuncti videbantur. Quartus situ inverso apparuit paulo depressior Tertio, & paulo elongatior a Jove: quare erat Tertio Borealis.

Sept. $\frac{1}{2}$ 10^h. 36". 23", Primus seu intimus Satelles incipit emergere ab Umbra, Tubo 25 Palm. Domini *Campani*.

Novemb. $\frac{12}{13}$ 7^h 32' 22", Primus Satelles incipit emergere, conspectus per Tubum Domini *Chiarelli* palm. 40. Deinde eundem

dem nocte 7^h 46'. Primus & Secundus proximi sunt, & 7^h. 53 iidem ita sunt vicini ut vix punctulo distinguantur.

Decemb. 9 N. S. vel Novemb. 28. V. S. 5^h. 45'. 45". Primus Satelles incipit emergere ab umbra Jovis.

Decemb. 21. V. S. 5^h. 50'. 22, iterum visus est primus Satelles incipiens emergere ex umbra.

Ex his observationibus accurato calculo subjectis, manifestum est æquationem secundam; quam a motu Luminis progressivo ortam supponimus, necessario locum habere. Nam post 57 satellitis intimi revolutiones, quibus Jupiter a Terra plusquam Radio Orbis magni recessit, novem fere minutis tardius conspecta est Eclipsis ultima, quam debuit juxta tenorem Observationis primæ: quod quidem Hypothesibus D. Cassini consonum est.

Ex iisdem etiam confirmatur (quod nos quoque antea annotavimus, nempe) quod motus Intimi Satellitis Jovis paulo celerior sit quam in Tabulis elaboratissimis D. Cassini, ante viginti annos cum publico communicatis, & calculi facilitate plurimum se commendantibus. Errorculus autem iste vix excedere videtur duo temporis minuta in singulis Jovis revolutionibus, sive duodecim annis; quibus cælum anticipat Cassini calculum. Hac vero adhibita correctione, satis accuratus habebitur consensus,
